Name:

at1121exam_practice: Radicals and Squares (v9)

Question 1

Simplify the radical expressions.

$$\sqrt{98} \qquad \sqrt{8} \qquad \sqrt{63}$$

Question 2

Find all solutions to the equation below:

$$\frac{(x+4)^2}{4} + 7 \;=\; 23$$

Question 3

By completing the square, find both solutions to the given equation. *You must show work for full credit!*

$$x^2 - 10x \;=\; 39$$

Question 4

A quadratic polynomial function is shown below in standard form.

$$y \;=\; 5x^2 + 40x + 73$$

Express the function in **vertex form** and identify the **location** of the vertex.